

Claims

[c1] I claim:

1. A solar powered ventilator arrangement in a cover member for covering the deck of boat, comprising:
 - a base defined by a first disc having a first plurality of axial tabs extending from its peripheral surface, a first cylindrical axial projection for receiving a pole to support and hold said cover member off said deck and a first plurality of axial openings that surround said axial projection;
 - a first intermediary member defined by a cylindrical body with first diameter adjacent a first end that is separated from a second diameter of a second end by a radial wall, a first axial bore that extends from said radial wall to said second end, a second plurality of axial openings in said radial wall that surround said axial bore, a second plurality of axial tabs that extend from the radial wall toward said first end, and an external first radial groove in said radial wall adjacent the peripheral surface of said first diameter of said cylindrical body, said first radial groove receiving a thickness of material of said cover member;
 - a motor housing located in said first axial bore of said

first intermediary member and retained therein through the engagement of said second axial tabs; a fan attached to said motor and located in a chamber defined by the engagement of said first end of said first intermediary member with said base; a second intermediary member defined by a second disc with a second axial projection that surrounds a second axial bore, said second axial bore receiving said second end of said first intermediary member, said second disc having a third plurality of axial openings; an end member defined by a third disc having a second annular groove located on a first face and an annular axial projection on a second face; a solar panel located in said second annular groove; a connector fixed to second face of said end member with a positive lead and a negative lead connected to said photo-electric cell; and fastener means that extend through said end member and said second intermediate member and engages said radial wall to align said second and third plurality of openings, compress said thickness of material of said cover member in said first annular groove and bring said positive and negative leads into contact with said motor to energize said motor and activate said fan such that air is continually drawn into said chamber through said first plurality of openings and discharged into the environ-

ment through said second and third plurality of openings during periods when light is received by said photoelectric cell.

- [c2] 2. The solar powered ventilator arrangement as recited in claim 1 wherein said first plurality of tabs are mated with corresponding loops that extend from said cylindrical body of said first intermediary member to secure said first intermediary member to said base.
- [c3] 3. The solar powered ventilator arrangement as recited in claim 2 further including a cap secured to said end member to define a dome for the end member that covers and protects said connector from the environment.
- [c4] 4. The solar powered ventilator arrangement as recited in claim 3 further including a sleeve located in said first axial bore that functions to define an electrical connection between said negative lead and said housing of said motor.
- [c5] 5. The solar powered ventilator arrangement as recited in claim 4 wherein said positive lead is located along the axis of said connector and engages a center post of said motor when the fastener is connected with the first intermediate member.
- [c6] 6. The solar powered ventilator arrangement as recited

in claim 5 wherein said disc member is characterized by a first plurality of reinforcing ribs that extend from said first cylindrical axial projection to said peripheral surface thereon through which the weight of said cover member is carried into said support pole.

- [c7] 7. The solar powered ventilator arrangement as recited in claim 6 wherein said second intermediary member is characterized by a second plurality of reinforcing ribs that extend from said second axial projection to its peripheral surface to assist in the flexing of the peripheral surface in compressing said material of said cover member in said first radial groove in said first intermediary member.
- [c8] 8. A powered ventilator arrangement in a cover member for covering the deck of boat, comprising:
 - a base defined by a first disc having a first plurality of axial tabs extending from its peripheral surface, a first cylindrical axial projection for receiving a pole to support and hold said cover member off said deck and a first plurality of axial openings that surround said axial projection;
 - a first intermediary member defined by a cylindrical body with first diameter adjacent a first end that is separated from a second diameter of a second end by a radial wall, a first axial bore that extends from said radial wall to

said second end, a second plurality of axial openings in said radial wall that surround said axial bore, a second plurality of axial tabs that extend from the radial wall toward said first end, and an external first radial groove in said radial wall adjacent the peripheral surface of said first diameter of said cylindrical body, said first radial groove receiving a thickness of material of said cover member;

a motor housing located in said first axial bore of said first intermediary member and retained therein through the engagement of said second axial tabs;

a fan attached to said motor and located in a chamber defined by the engagement of said first end of said first intermediary member with said base;

a second intermediary member defined by a second disc with a second axial projection that surrounds a second axial bore, said second axial bore receiving said second end of said first intermediary member, said second disc having a third plurality of axial openings;

an end member defined by a third disc having an annular axial projection that surrounds an third axial bore;

fastener means that extends through said end member and said second intermediate member and engages said radial wall to align said second and third plurality of openings and compress said thickness of material of said cover member in said first annular groove; and

a source of electrical energy having a connector that extends through said third axial bore and into said second axial bore to bring a positive lead and a negative lead into contact with corresponding leads of said motor to energize said motor and activate said fan such that air is continually drawn into said chamber through said first plurality of openings and discharged into the environment through said second and third plurality of openings.

- [c9] 9. The powered ventilator as recited in claim 8 wherein said source of electrical energy is a solar panel located in said end member.
- [c10] 10. The powered ventilator as recited in claim 8 wherein said source of electrical energy is a battery.
- [c11] 11. The powered ventilator as recited in claim 8 wherein said source of electrical energy is a converter that changes alternating current to direct current.
- [c12] 12. The powered ventilator as recited in claim 8 wherein said source of electrical energy is a photo-electric cell that is remotely positioned with respect to said cover member.